# **Trichinosis**

# **Fact Sheet**



## Maine Center for Disease Control and Prevention

An Office of the Department of Health and Human Services

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#### What is trichinosis?

Trichinosis (trick-i-no-sis), also called trichinellosis (trick-i-nell-o-sis), is caused by eating raw or undercooked meat of animals infected with the larvae of a species of worm called *Trichinella*. Infection occurs commonly in certain wild carnivorous (meat-eating) animals but may also occur in domestic pigs.

# What are the signs and symptoms of trichinosis?

Nausea, diarrhea, vomiting, fatigue, fever, and abdominal discomfort are the first symptoms of trichinosis. Headaches, fevers, chills, cough, eye swelling, aching joints, muscle pains, itchy skin, diarrhea, or constipation follow the first symptoms. If the infection is heavy, patients may experience difficulty coordinating movements, and have heart and breathing problems. In severe cases, death can occur. For mild to moderate infections, most symptoms subside within a few months. Fatigue, weakness, and diarrhea may last for months.

# How soon after infection will symptoms appear?

Abdominal symptoms can occur 1-2 days after infection. Further symptoms usually start 2-8 weeks after eating contaminated meat. Symptoms may range from very mild to severe and relate to the number of infectious worms consumed in meat. Often, mild cases of trichinosis are never specifically diagnosed and are assumed to be the flu or other common illnesses.

# How does infection occur in humans and animals?

When a human or animal eats meat that contains infective *Trichinella* cysts, the acid in the stomach dissolves the hard covering of the cyst and releases the worms. The worms pass into the small intestine and, in 1-2 days, become mature. After mating, adult females lay eggs. Eggs develop into immature worms, travel through the arteries, and are transported to muscles. Within the muscles, the worms curl into a ball and encyst (become enclosed in a capsule). Infection occurs

when these encysted worms are consumed in meat.

#### Am I at risk for trichinosis?

If you eat raw or undercooked meats, particularly bear, pork, wild feline (such as a cougar), fox, dog, wolf, horse, seal, or walrus, you are at risk for trichinosis.

### Can I spread trichinosis to others?

No. Infection can only occur by eating raw or undercooked meat containing *Trichinella* worms.

### What should I do if I think I have trichinosis?

See your health care provider who can order tests and treat symptoms of trichinosis infection. If you have eaten raw or undercooked meat, you should tell your health care provider.

## How is trichinosis infection diagnosed?

A blood test or muscle biopsy can show if you have trichinosis.

#### How is trichinosis infection treated?

Several safe and effective prescription drugs are available to treat trichinosis. Treatment should begin as soon as possible and the decision to treat is based upon symptoms, exposure to raw or undercooked meat, and laboratory test results.

#### Is trichinosis common in the United States?

Infection was once very common and usually caused by ingestion of undercooked pork. However, infection is now relatively rare. During 2000-2006, an average of 13 cases per year were reported. The number of cases has decreased because of legislation prohibiting the feeding of raw-meat garbage to hogs, commercial and home freezing of pork, and the public awareness of the danger of eating raw or undercooked pork products. Cases are less commonly associated with pork products and more often associated with eating raw or undercooked wild game meats.

### How can I prevent trichinosis?

- Cook meat products until the juices run clear or to an internal temperature of 170°
   F.
- Freeze pork less than 6 inches thick for 20 days at 5°F to kill any worms.
- Cook wild game meat thoroughly.
  Freezing wild game meats, unlike freezing pork products, even for long periods of time, may not effectively kill all worms.
- Cook all meat fed to pigs or other wild animals.

- Do not allow hogs to eat uncooked carcasses of other animals, including rats, which may be infected with trichinosis.
- Clean meat grinders thoroughly if you prepare your own ground meats.
- Curing (salting), drying, smoking, or microwaving meat does not consistently kill infective worms.

## Where can I get more information?

For more information contact your healthcare provider or local health center. You can also contact the Maine Center for Disease Control and Prevention by calling 1-800-821-5821. The federal Centers for Disease Control and Prevention website - <a href="http://www.cdc.gov">http://www.cdc.gov</a> - is another excellent source of health information.